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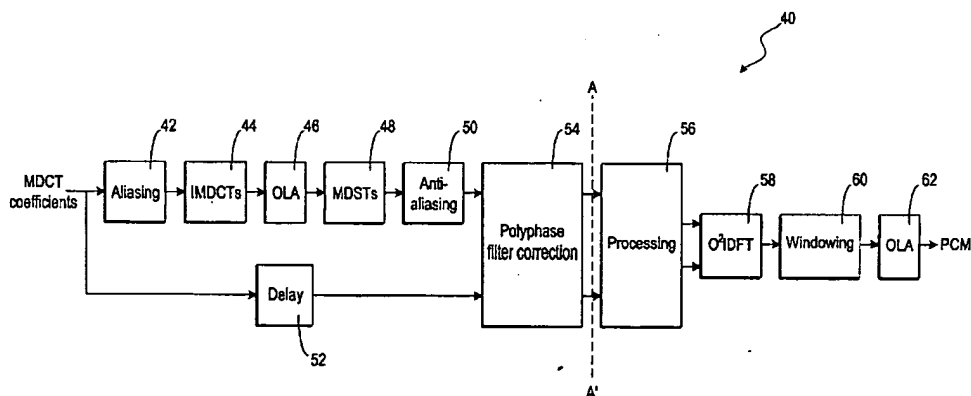
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(54) Title: **AUDIO SIGNAL DECODING USING COMPLEX-VALUED DATA**

(57) Abstract: A decoder particularly, but not exclusively, for MPEG-1 layer III data signals, in which recovered spectral coefficients are transformed into time domain signal components, the time domain signal components then being transformed, using a forward transform which is orthogonally modulated with respect to the forward transform that was used at the encoder, to produce a set of second spectral coefficients. In this way, the first and second spectral coefficients may be used as complex-valued spectral coefficients which are amenable to post-processing. In the preferred embodiment, the complex-valued frequency components are, after post-processing, transformed to the time domain using an odd-frequency modulated Discrete Fourier Transform (DFT).

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